



CHAPTER 4 GUIDELINES FOR NEW CONSTRUCTION



The Village of Waterford is one of the earliest settlements in the county. Preserving its unique character allows the county to provide a physical reminder of this rich heritage for all present and future generations. Waterford is particularly significant since it is also listed as one of Virginia's few National Historic Landmarks.



The circa 1995 Good House uses materials found on many historic Waterford structures including a stone foundation, weatherboard siding and a standing-seam metal roof. Its form also follows local historic precedents with its gable roof form, dormers, and full-width porch.

A. INTRODUCTION

The Village of Waterford is one of the earliest settlements in the county. Preserving its unique character allows the county to provide a physical reminder of this rich heritage for all present and future generations. Waterford is particularly significant since it is also listed as one of Virginia's few National Historic Landmarks.

Therefore, any change made to Waterford needs to be very carefully designed so that any new building respects this important historic setting. The goal is to preserve the fragile and unique character of Waterford, not to challenge or compete with it. Thus the new building should be a "background" design, that is, one that does not draw attention to itself at the expense of its historic neighbors.

While there are various historic styles and different building types in Waterford, the buildings were constructed of traditional materials and often have a similar scale and size. Many also had decorative details depending on their era and style with the exception of simple outbuildings. These materials and details help create a human scale to the building and add visual interest to the design.

New buildings should use traditional materials or new materials that have a similar appearance to the original. These new designs also should have some type of traditional decorative details that fit the building. Most buildings throughout history had some type of decoration until the modern movement of the twentieth century.



A. INTRODUCTION, continued

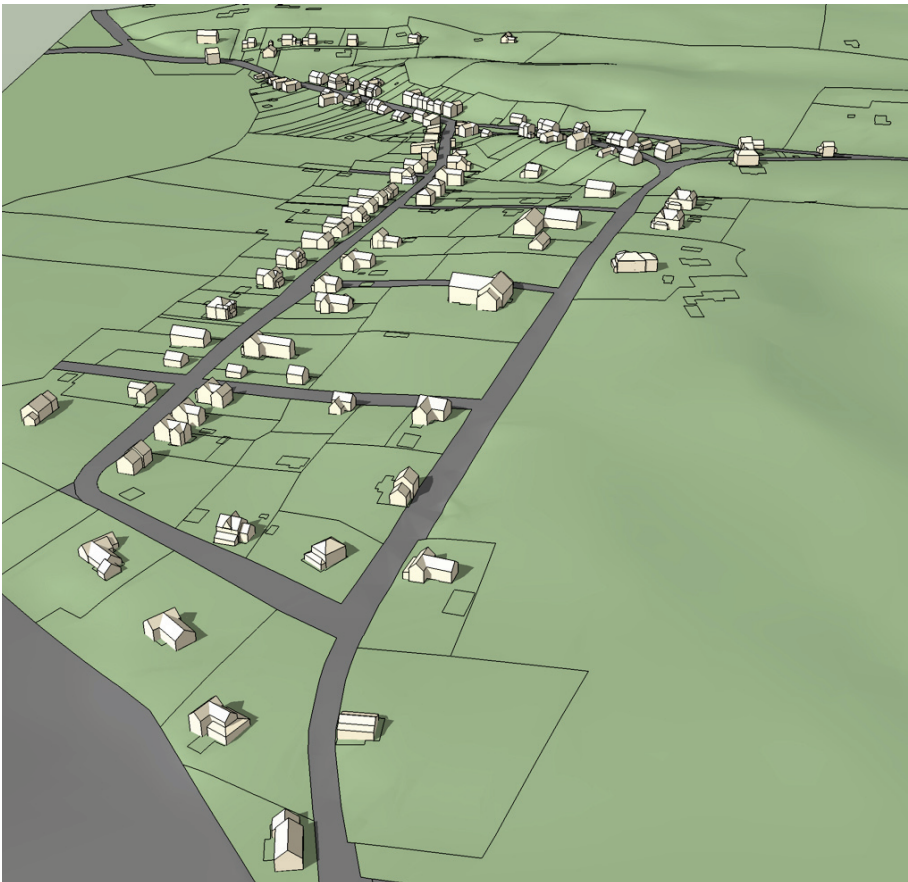
Today, many architects and designers advocate designing a “building of the times,” a phase meaning a more modern design. The philosophy of the modern style has been that form should follow the function of the building. Often the structure of the building was physically revealed to express honesty in the design. Modern materials such as glass, concrete and metal were used to reflect the technology of the times. Any decoration was considered unnecessary, dishonest, and a compromise to the purity of the designer’s intent. Regional architectural traditions or materials were abandoned for a global

aesthetic of the machine age. Designing with any reference to traditional buildings or historic imagery was considered quaint, outdated and not relevant to modern times. It is an obvious challenge to take this modernist approach when designing a new building in the historic districts if the goal is to respect the existing architectural character of the county’s heritage.

The following guidelines for new construction provide more detailed information on how new designs can reflect the various design attributes of the historic buildings to ensure better compatibility between the new and old.

■ GUIDELINES FOR CONTEMPORARY DESIGN

1. Contemporary design, both as new structures and as additions to existing ones which is sensitive to its historic surroundings through compatible scale, massing, materials, siting, and design details, is welcome and appropriate in the villages.
2. Contemporary design may be suitable in the rural area(s) where its relationship should be to the natural landscape rather than to other buildings.



The relative placement, scale, and massing of Waterford's historic buildings are seen in this three-dimensional rendering.





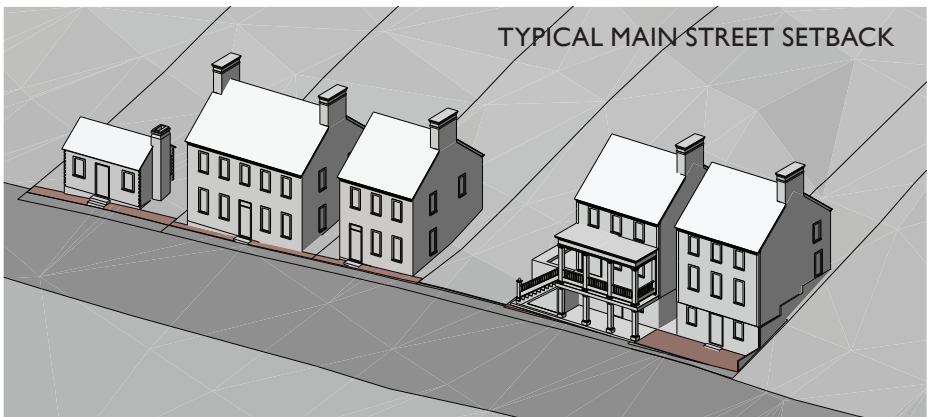
Second Street has relatively uniform setbacks that create front yards with ample room for plantings to provide a shade canopy in the summer.

B. SETBACK/SITING/TOPOGRAPHY

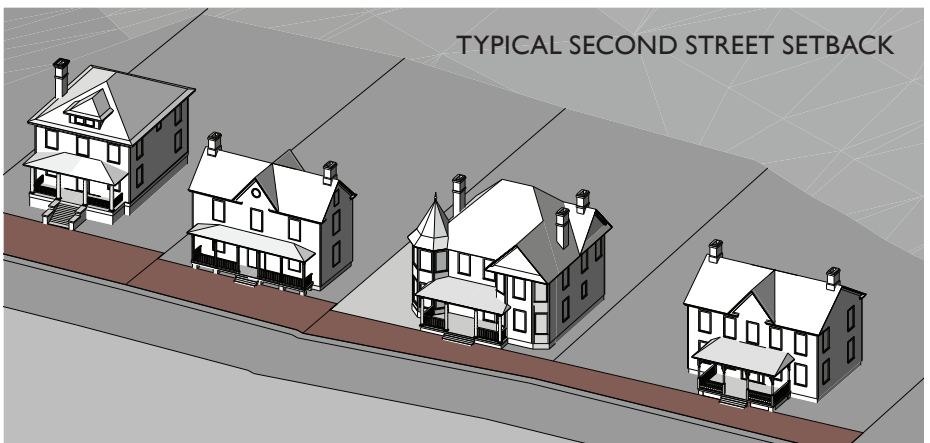
Setback is defined by *Section 1-200(J)* of the *Zoning Ordinance* as the distance measured between the wider of the following options; (a) the existing dedicated right-of-way, (b) the right-of-way proposed in the Comprehensive Plan, or (c) the minimum dedicated right-of-way permitted by VDOT for maintenance. Although regulations will vary with the underlying zoning in each district, the historic overlay zoning (*Section 6-1805*) allows the setback of new construction to reinforce existing historic precedent.

■ GUIDELINES

1. Relate the setback of any new construction in Waterford to the character of adjacent existing historic structures.
2. Commercial structures should have little to no setback.
3. Residences should be sited to reinforce the character of the adjacent dwellings.
4. Use the historic placement of the type of building that you seek to construct. If you seek to construct a house between a commercial and residential building, use the residential building as your guide.



Setbacks for new construction should reinforce the dominant condition of surrounding properties. In Waterford, they may range from a limited setback on portions of Main Street to deeper setbacks on High Street.

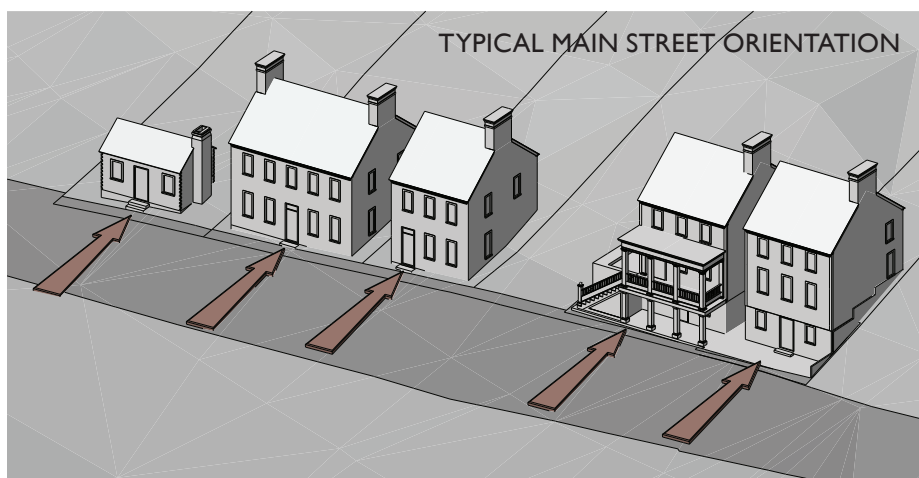


C. ORIENTATION

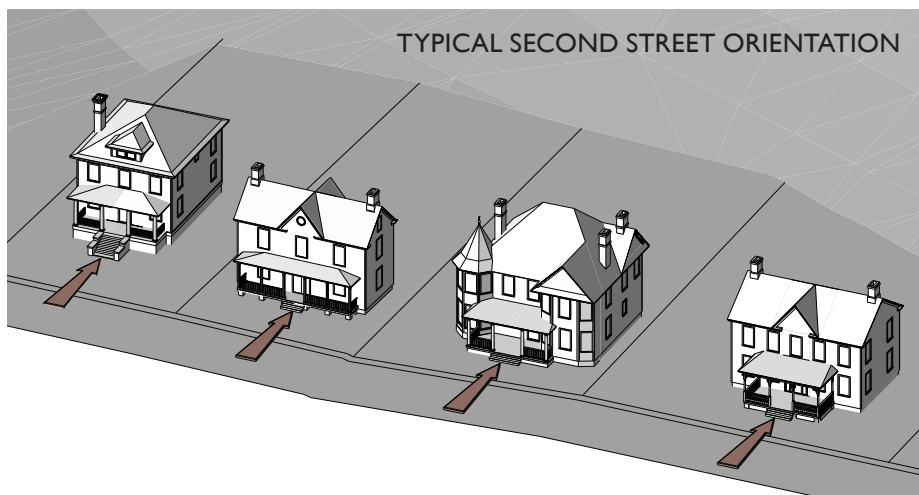
Orientation refers to the direction the front (facade) of the building faces. In Waterford, most early houses and commercial buildings were sited to take advantage of topography and align with historic trade routes. Later residences may have been built to take advantage of pastoral views and are oriented to the street.

■ GUIDELINES

1. Orient the facades of new structures to the street onto which the lot faces.
2. Orient the primary facade to the major street if the building is to be constructed on a corner lot in Waterford.
3. On larger, more rural parcels, it may be possible to orient new construction to the weather to take advantage of passive solar heating and negate the effects of prevailing winds.
4. Detached one-car garages in Waterford should follow the historic precedent for placement at the rear of the lot and facing the street.



New construction should respect the consistent orientation of the front of each house to the primary street in the village.

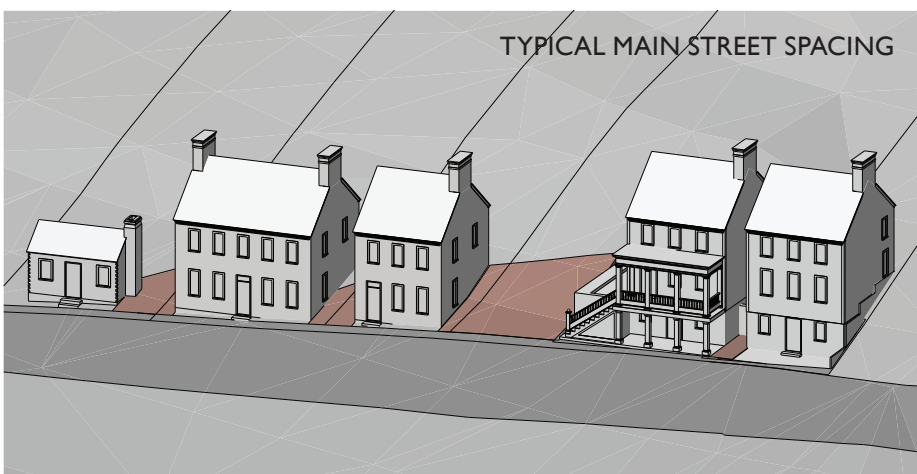


D. SPACING

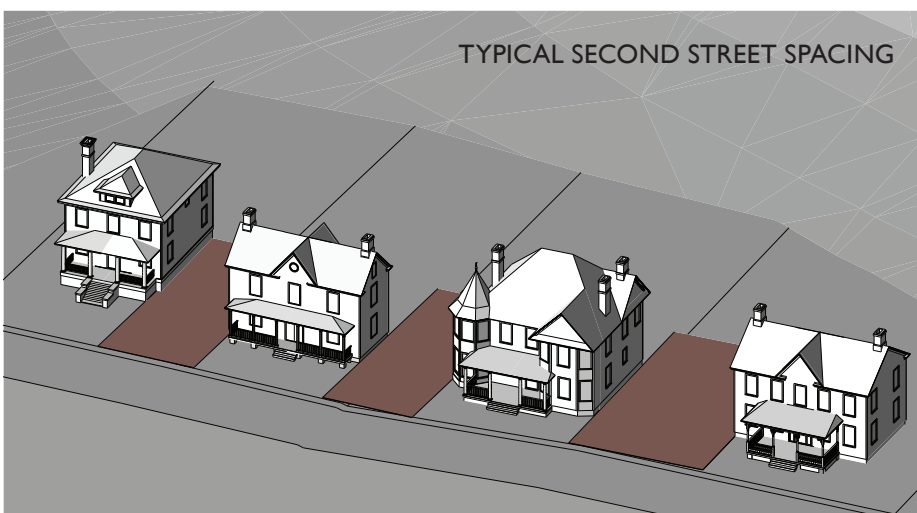
Spacing refers to the side yard distances between buildings. Underlying zoning regulations in the districts specify minimum side yards. Through the historic district overlay zoning (*Section 6-1805*), these may be altered to ensure that new construction is consistent with the historic streetscape.

■ GUIDELINE

- I. Space new construction within ten percent of the historic precedent on the block and adhere to other applicable zoning regulations. The spacing of buildings, both residential and commercial, is more compact towards the historic center of Waterford.



Random spacing between buildings may be found where lots remain undeveloped or a building has been lost over time.



More regular spacing occurs in areas of the district that saw late-nineteenth and early twentieth century development.



E. MASSING

The overall massing of a building relates to the organization and relative size of the building sections or pieces of a building. The nature of the mass will be further defined by other criteria in this chapter, such as height, width, and directional expression.

The earliest original structures were often rectangular in shape. Several one-story masses containing trade shops were later added onto and reach three stories along Main Street. Where the lot size and topography allowed, additions were often attached to one side rather than above or to the rear of the structure. In some cases, these additions were a half-story or more higher than the original mass.

Most freestanding structures in Waterford are two- to two-and-one-half stories tall. Some one-story freestanding structures have also been preserved.

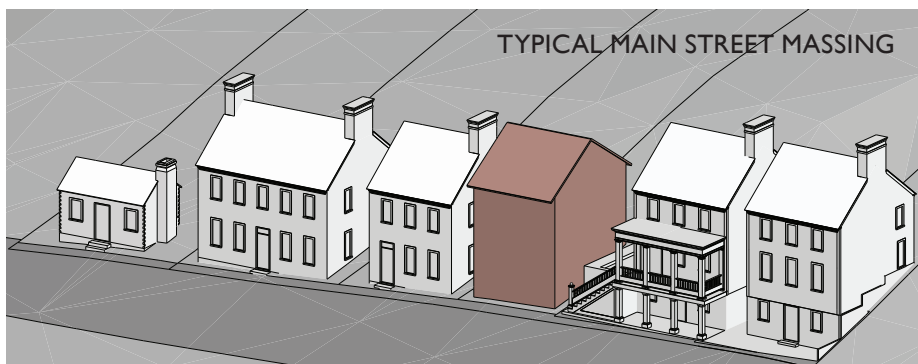
The existing massing of historic structures may be used as a precedent for new construction; however, new additions must be subordinate in their massing to the historic structure. This concept will be covered in more detail in *Chapter 5: Additions*.

■ INAPPROPRIATE TREATMENT

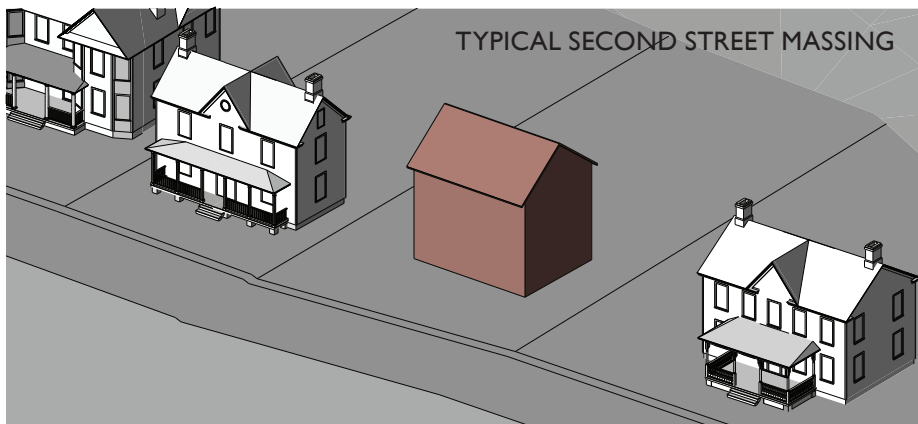
1. Do not try to contain an entire structure in one mass, unless it is a townhouse form that respects the massing of adjacent structures.

■ GUIDELINES

1. Use massing that relates to existing adjacent historic structures.
2. Where the footprint of new construction is larger than historic precedents, look to historic examples of dwellings that grew over time. Differing periods of construction are often represented by a series of separate masses.
3. Reduce the perceived mass by dividing the structure into simple intersecting masses with varying rooflines according to existing historic structures.
4. Continue the precedent of one primary mass with one or more secondary masses.



An **APPROPRIATE** example of mass for new construction relates to adjacent house forms. This example respects the height, width and scale of its neighbors.



In this **APPROPRIATE** example of mass for new construction, the new structure respects the rectangular mass, height, and width of adjacent structures.



F. COMPLEXITY OF FORM

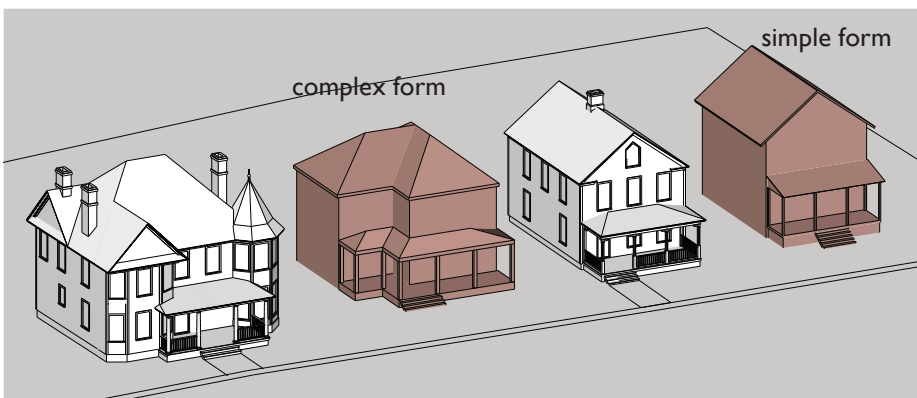
A building's form, or shape, can be simple (a box) or complex (a combination of many boxes or projections and indentations).

Most early structures in Waterford reflect a simple form. After the Civil War, forms became more complex due to new construction techniques. This allowed for the economical construction of the more complicated massing of some Victorian era structures, especially in the Queen Anne style. However, most Waterford structures retained a simple massing, often adding a rear ell to the original rectangular structure to create an L- or T-shaped structure.

As structures adapted over centuries, more than one addition may have been added creating a more complex form than originally envisioned for the structure. These subsequent additions reflect the evolution of the house and create additional living space.

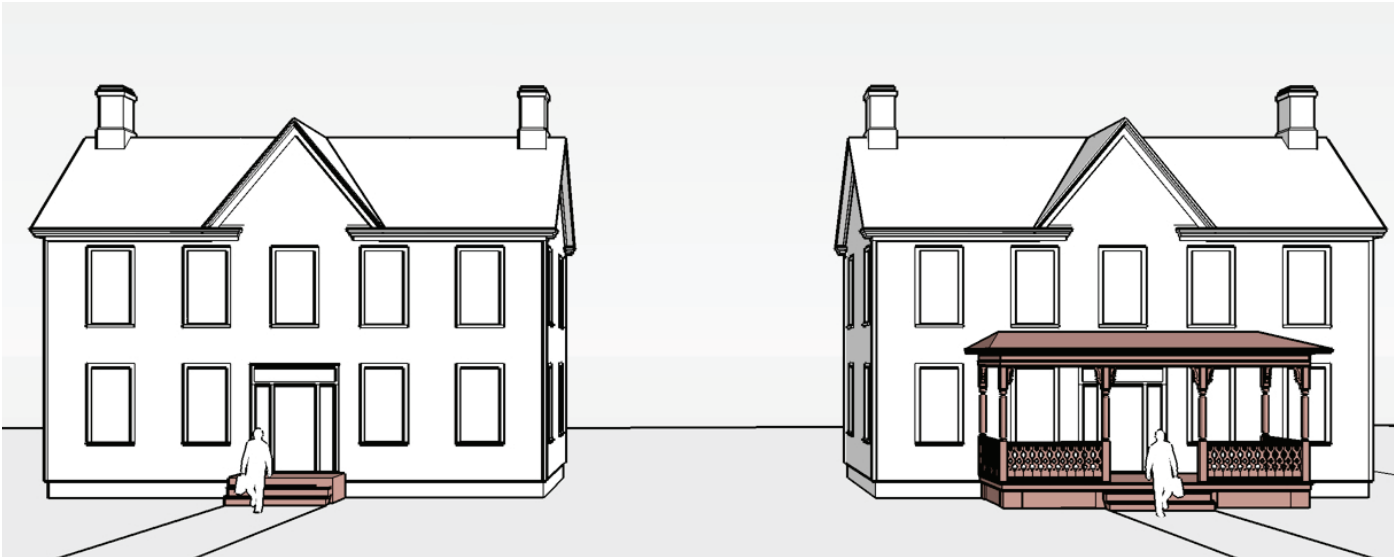
■ GUIDELINES

1. Use forms for new construction that relate to historic precedents in the district. Most Waterford structures were built before complex forms became popular and therefore, simple forms are best suited to new construction in the district.
2. Look to local precedents for complex massing that evolved from simple forms over time to inform new construction. It may not be feasible to accommodate all uses within one simple rectangular form and roof mass.



Most historic dwellings in Waterford have simple forms. More complex forms may be found in Victorian period examples.





A side-by-side comparison of the same house with and without a porch shows how a porch can be used to reduce the perceived size of the structure and relate it to a human scale.

G. HEIGHT, WIDTH AND SCALE

The actual size of a new building can either contribute to, or be in conflict with, the existing structures in a historic district. Height and width create scale. Scale in architecture is the relationship of the human form to the building. It is also the relationship of the height and width of one building to another.

Most single-family dwellings in Waterford are two- to two-and-one-half stories tall. Width in architecture is often defined as the number of bays a structure contains. A bay is the portion of the facade that contains a window or door. Most Waterford structures are between three and five bays wide. For information on proportions of openings, see *Doors and Windows* later in this chapter.

■ GUIDELINES

1. Establish the height of a proposed new building within ten percent of the average height of adjacent historic structures to achieve visual compatibility. In areas where the topography varies, the siting of the structure should not result in the roofline of the structure rising more than ten percent above existing neighboring structures.
2. Design new buildings to respect the width and bay divisions of historic structures along the street. Flexibility in the width of new structures may occur due to different era and styles of construction and the structure's placement on the lot.
3. Reinforce the human scale by including functional elements that reinforce the character of the district, such as porches and porticos.





This Federal-style structure originally had a vertical expression. When an addition was made to the side of the structure, its directional expression became horizontal.

H. DIRECTIONAL EXPRESSION

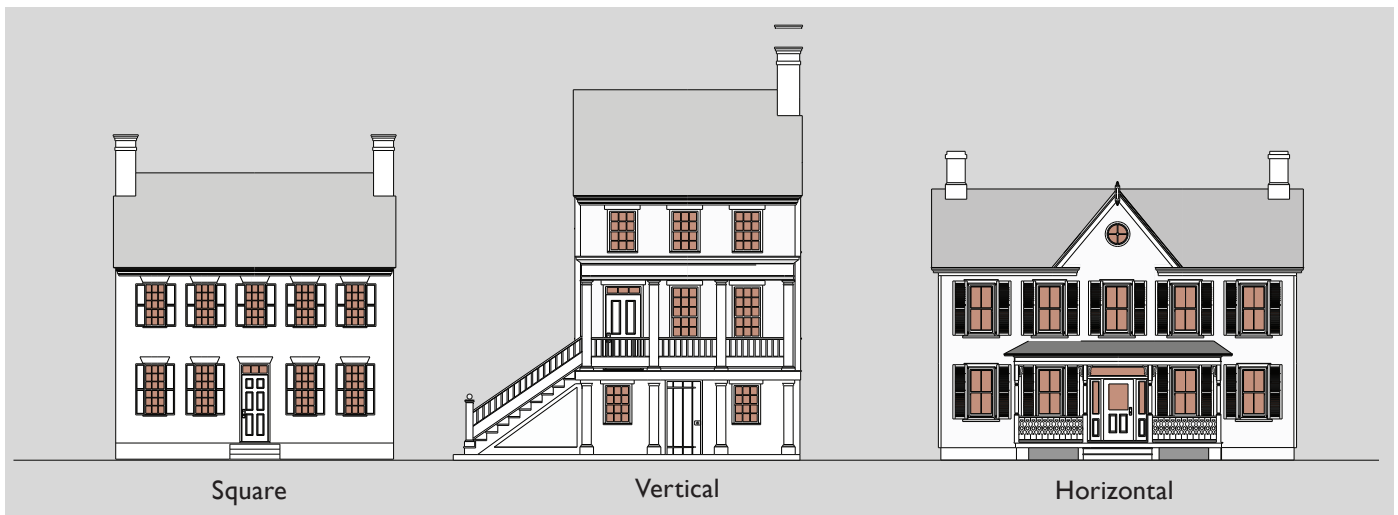
The relationship of the height and width of the front elevation of a building mass provides its directional expression. A building may be horizontal, vertical or square in its proportions.

The earliest vernacular buildings in Waterford were often a single story and display a horizontal expression. Where additions were made to the side of these structures that expression was reinforced. Later two-story structures approach a more square mass depending on their width in relation to their height. Often, later additions on axis with the original structure converted these structures to a more horizontal expression.

Balloon framing led to taller buildings in the late-nineteenth century. However, many vernacular Victorian-era houses retained a horizontal expression accentuated by one-story porches. Higher-style examples such as Queen Anne dwellings with corner turrets and Italianate buildings with long arched windows and bracketed eaves were often more vertically expressed.

■ GUIDELINE

- I. Reflect the directional expression of adjacent historic structures in new village construction.



There are examples of square, vertical, and horizontal directional expression in Waterford.

I. ROOF FORM AND MATERIALS

Roof form plays an important role in defining the form of a building, while the materials of the roof help to define its character and create continuity and rhythm in the district. Most roofs in Waterford are side-gabled and covered in standing-seam metal. Refer to *Chapter 7: Materials* for guidance on appropriate roof materials and dimensions.

INAPPROPRIATE TREATMENT

1. Avoid creating a large mass that will result in a very tall steeply pitched roof.

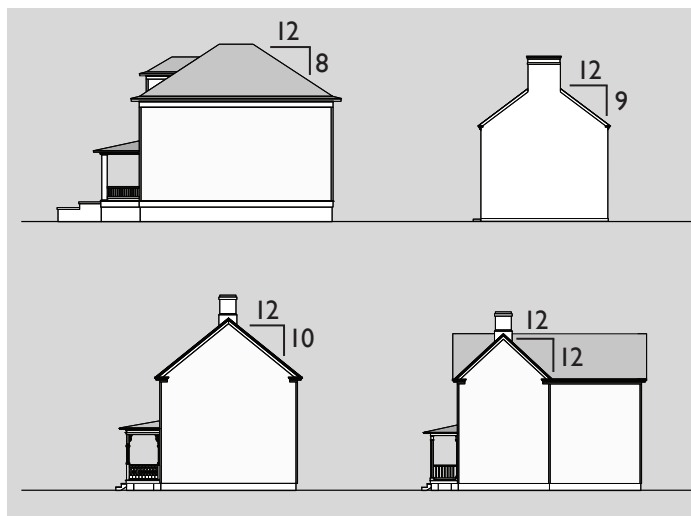
GUIDELINES

1. Use roof forms for new residential buildings that relate to adjacent historic examples. Most often this will be a gable roof.
2. Reflect the historic roof pitch(es) of adjacent historic structures in the roof pitch for new buildings of similar use. Historically roof pitches were between seven-in-twelve and twelve-in-twelve.
3. Use roof materials that approximate a historic appearance.
 - d. Appropriate materials in the districts include standing-seam metal, wood, and slate. Some metal products are available pre-painted to reduce maintenance.
 - e. Cement shingles that approximate the historic profile of wood shingles, or artificial slate may also be used. These products are preferable to asphalt.
 - f. In some instances the HDRC may approve the use of dark, consistently colored, asphalt composition shingles.



The multiple side gable roof forms of this example respect the scale of historic roofs. They are covered in standing-seam metal, a prevalent roof material on the district's historic structures.

COMMON ROOF PITCHES

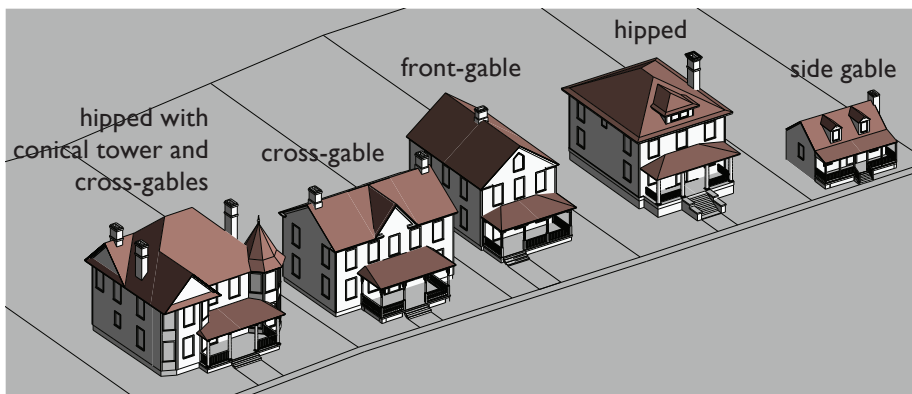


Respect the roof forms and pitches historically found on the houses and porches in the district. There is a wide variety of roof forms in Waterford and they often relate to the style of the house.

NOTE:

The first number in the pitch, seven, is the number of inches of height; and the second number, twelve, is the length of the slope during this rise in height. Therefore, a seven-in-twelve pitch means that the roof is rising seven inches in height for each foot of slope.

COMMON ROOF FORMS



NOTE:

The Dormer Defined

A dormer is defined as a separately framed roof element that projects from a sloping roof, contains a vertical window, and is covered by its own roof. The most common types of dormers take their names from the roof profile and include gabled, hipped, and shed dormers. By bringing light to the attic story of a house, dormers allow that space to become usable living space.



These symmetrically placed roof dormers are scaled to the window opening of the house.



A rare Waterford example of a finial sits atop the Elton James House built in 1896 in the Queen Anne style.

J. ROOF FEATURES

Roof features may be divided into three categories:

- Structural design features such as dormers, light wells, skylights, and cupolas or belvederes. Their historical purpose was to bring light and/or air to the building's interior before the age of electricity and air-conditioning.
- Decorative roof features such as finials and cresting. These features are not typically found in the districts.
- Modern mechanical features including solar panels, satellite dishes and mechanical equipment.

INAPPROPRIATE TREATMENTS

1. Bubble or domed skylights are unacceptable.

GUIDELINES

1. Consider the use of dormers for new construction. By punctuating a large sloping roof with dormers, it may reduce the perceived mass of the roof.
2. Scale the dormers proportionately to the scale of the building and roof masses. Look to historic precedents for appropriate size ratios, rhythm and dormer locations.
3. Match the slope or pitch of the dormer roof to match to that of the roof of the main structure.
4. Consider the use of features that bring light and air into the structure. Many of the roof features described above have been reintroduced as part of the green design movement and should be considered as a way to reduce the energy consumption of new construction.
5. Locate skylights, solar panels, satellite dishes and various types of roof-mounted mechanical equipment on the rear or side of the roof where least visible from public roads, walkways and neighboring properties.
 - a. Use solar panels that are the same size and dimension as shingle roofing materials or that fit within standing-seam metal panels.
6. Use a parapet wall or other roof feature to screen modern appurtenances such as satellite dishes and mechanical equipment that cannot be placed in an out-of-site rooftop location.

K. CHIMNEYS

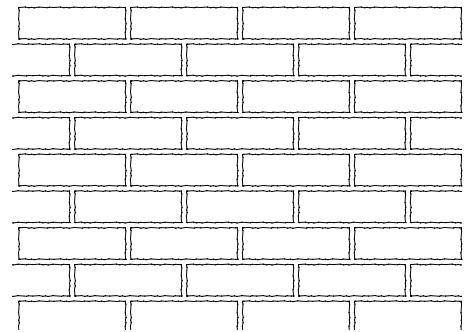
Masonry chimneys are a character-defining feature of dwellings in Waterford. They were, and may still be, an integral part of a house's heating system. Early exterior chimneys in Waterford are constructed of local fieldstone, local brick, or both of these materials, with the stone comprising the lower section. Later chimneys are predominantly located to the interior of the structure, at one or both ends, and are constructed of brick.

INAPPROPRIATE TREATMENTS

1. Do not use exterior metal pipe chimneys.
2. Do not clad exterior chimneys in wood siding.
3. Do not use artificial materials that simulate brick or stone.
4. Do not use Flemish or common-bond brick patterns in new chimney construction.

GUIDELINES

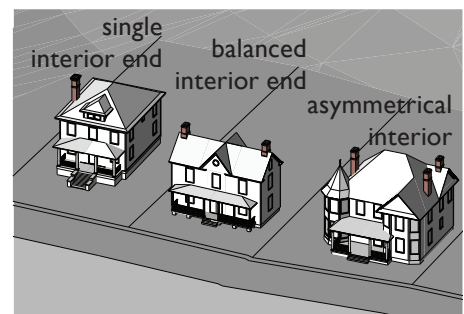
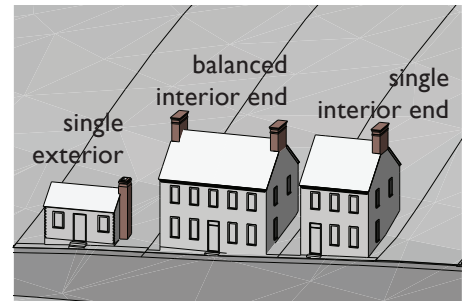
1. Construct exterior chimneys of locally available fieldstone or brick in a historically accurate color-range for the Waterford district.
 - a. Historically, brick chimneys were laid in a running bond pattern. New chimneys should follow this precedent in areas where they are visible.
2. Locate chimneys according to historic precedents.
 - a. Chimneys may be placed to the exterior or interior of a structure.
 - b. Exterior chimneys should usually be placed on the gable wall of a structure. Historically, most chimneys were placed centered on the gable wall end.
 - c. Interior end chimneys are often located at the gable ends of historic structures.
4. New chimneys should be sympathetic to the design of those found on adjacent historic structures.



Running Bond

This brick pattern is appropriate for chimneys.

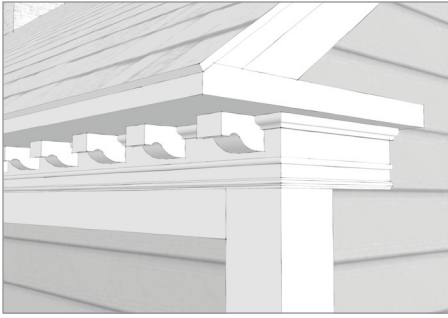
CHIMNEY PLACEMENT



Chimney placement is dependent upon the period of construction and style of the dwelling. Symmetrical architectural designs often feature balanced chimneys at each end while asymmetrical designs locate chimneys according to the irregular layout of the floor plan.



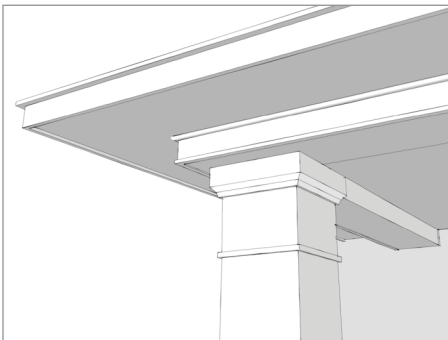
Waterford's historic structures provide many examples for the design of both interior and exterior end chimneys, many with corbelled caps.



Decorative cornices use details such as brackets and modillion blocks.



Cornices on Victorian-era buildings may be accented with brackets or other woodwork.



An overhang is often seen on Bungalow and American Foursquare architectural styles and is the exaggerated extension of the roofline past the wall plane.

L. CORNICES, OVERHANGS AND PARAPETS

The cornice is the embellishment of the junction between the roof and the wall and may also be found on porches. Their material and design depend on the style and character of the rest of the building.

A cornice may be located at the intersection of the roof and the wall, below a porch roof, or above a storefront. The material and design depend on the style and character of the rest of the building.

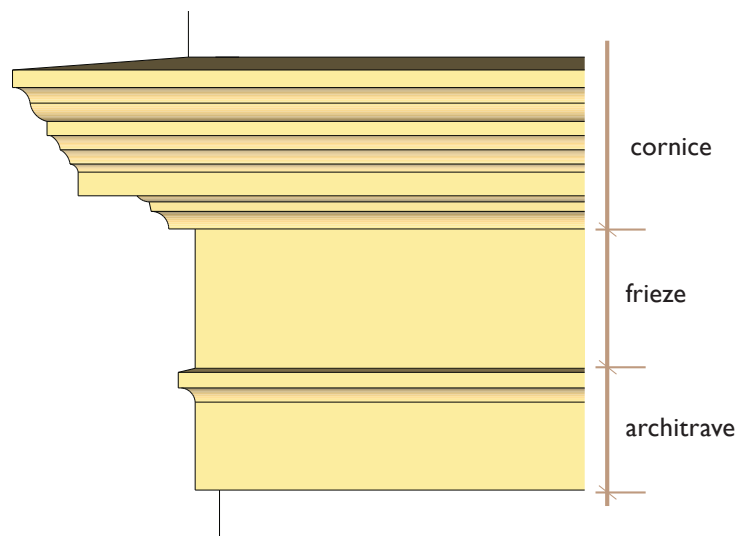
■ INAPPROPRIATE TREATMENT

1. Do not use exaggerated or oversized cornices and cornice elements on new construction.

■ GUIDELINES

1. Consider the uses of a cornice, overhang, or parapet at the roofline of new construction in Waterford.
2. Look to historic precedents to inform the design of these features and provide good information on scale and placement. The cornice design should relate to the overall style of the new dwelling.
3. Use materials that complement those found in the area where the new building is being constructed. Wood is the most appropriate material to use but some substitute products may be approved. See *Chapter 3, Section F* for more guidance.

ELEMENTS OF A CLASSICAL ENTABLATURE (CORNICE)



M. DOORS, WINDOWS, AND SHUTTERS

The size, proportion, pattern, and articulation of door and window openings help to give a building its character. Doors and windows help to define a building's particular style through the rhythm, patterns, size, proportions, and ratio of solids to voids.

Doors allow access to the interior of a building and combine a functional purpose with a decorative one. Secondary entrances are often more utilitarian. Original doors can be found on many houses in the districts and may provide a guide for new door choices.

Windows add light to the interior of a building, provide ventilation, and allow a visual link to the outside. From the late eighteenth through late-nineteenth centuries both the size of individual glass panes and the overall opening size of windows increased incrementally. In the early twentieth century a number of revival styles saw a return to smaller upper panes, often over a larger single paned lower sash.

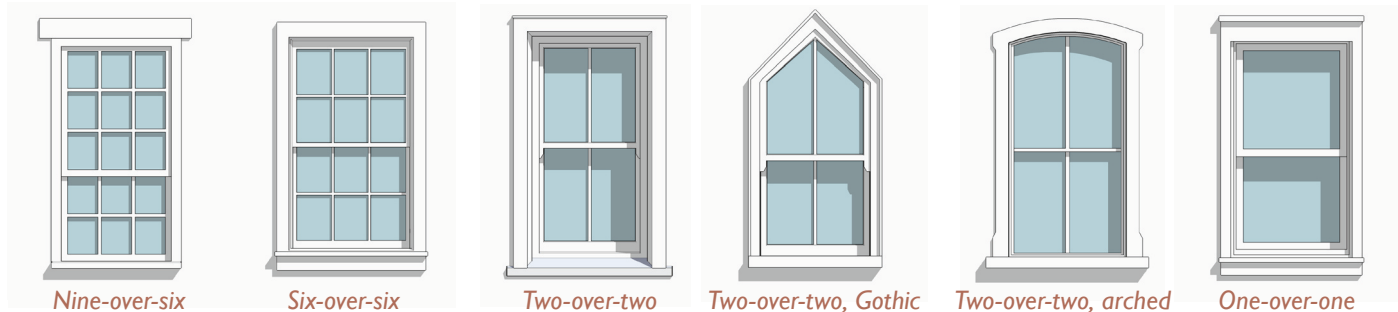
In a technique known as diminution of fenestration, windows on the second level of historic buildings were often smaller (e.g. six-over-six) than those on the ground or first level (e.g. nine-over-six). Most window trim was flat, plain wood although some examples have a bead detail. In some brick construction examples a flat brick or jack arch was used to crown the window opening.

Shutters were commonly used by the mid-nineteenth century to control the amount of light and air that entered a structure. They also protected the window from the effects of harsh weather by blocking wind and shedding rain away from the opening. Through time shutters have become a predominantly decorative feature.



When set into brick construction, care should be taken to follow historic precedent for placement of the window recessed within the wall.

TYPICAL WINDOW STYLES



Highlighting the windows and doors of typical house styles found in the district shows the balanced arrangement of these openings.



■ INAPPROPRIATE TREATMENTS

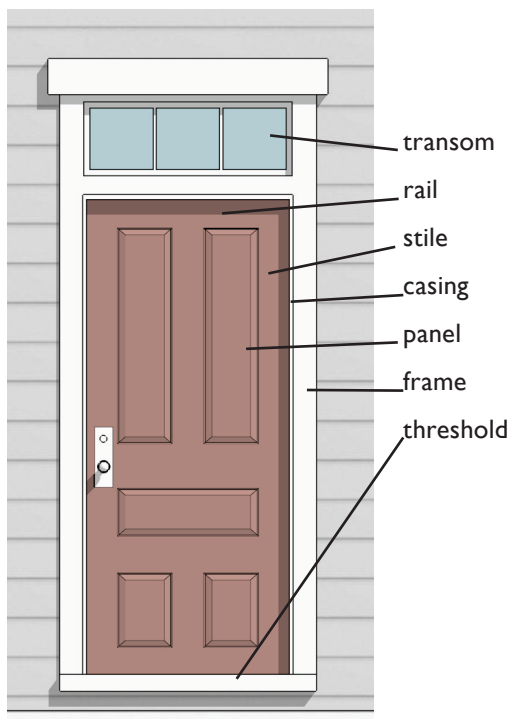
Doors and Windows

1. Do not stain or leave doors, windows and their frames, a natural wood color. Historically wood was painted to increase the longevity of the building material.
2. Do not use unfinished aluminum as a finish for doors or storm doors. Doors should be painted to match the house trim.
3. Do not use false/snap-in muntins or internal removable grilles because they do not present a historic appearance.
4. Avoid designing false windows in new construction.
5. Do not use mirrored glass on any building in the historic districts. Tinted or low-e glass may be strategies to reduce heat gain and preserve the interior.
6. Do not use large single-pane bay windows as there is no precedent for their use in historic Waterford structures.

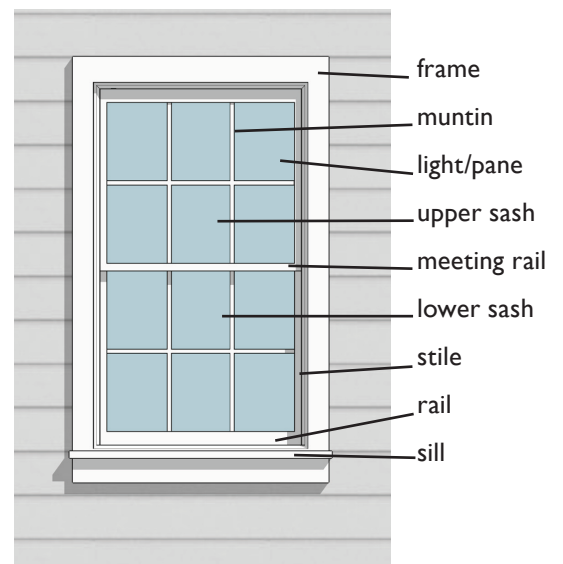
Shutters

7. Do not use shutters on composite or bay windows.
8. Do not install shutters by screwing or otherwise permanently affixing them to the wall of the structure, therefore, making them inoperable.

ELEMENTS OF A DOOR



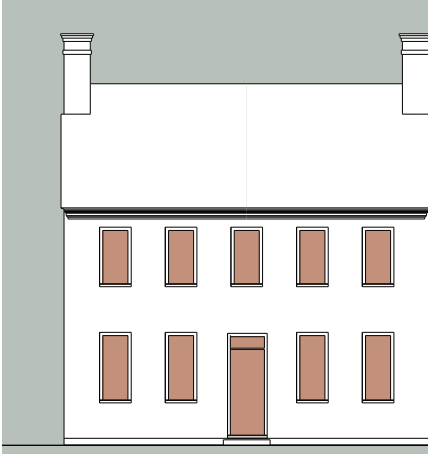
ELEMENTS OF A DOUBLE-HUNG WINDOW



M. DOORS, WINDOWS, AND SHUTTERS, continued

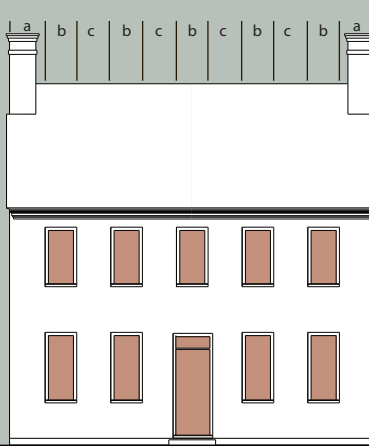
■ GUIDELINES

RATIO OF SOLIDS TO VOIDS



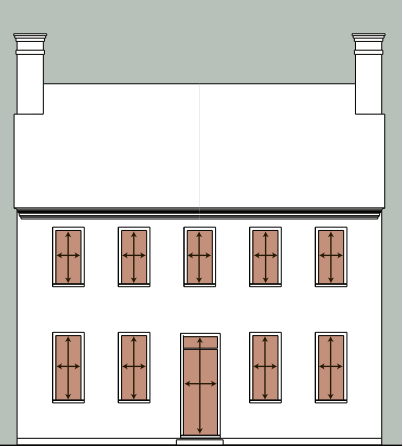
1. Relate and make compatible the ratio of solids (walls) and voids (windows and doors) of new buildings to that of adjacent historic houses.

RHYTHM OF OPENINGS



2. Make sure the rhythm and placement of window and door openings are compatible with those of adjacent historic structures.

PROPORTION OF OPENINGS



3. Ensure that the size and proportion of window and door openings, or the ratio of width to height, compatible with those on nearby historic houses. If the house is larger than its historic neighbors, use openings that are proportionately sized rather than respecting the historic size.

4. Respect the traditional design of openings that are generally recessed on masonry buildings and have a raised surround on frame buildings. New construction should follow these methods as opposed to designing openings that are flush with the rest of the wall.

Doors

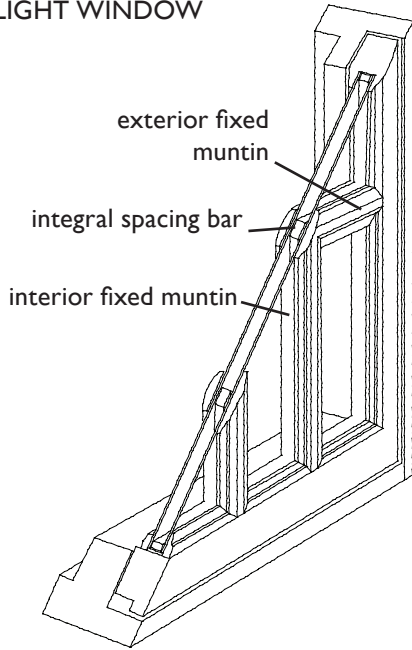
5. Relate new doors to the door styles found historically in Waterford.
6. Use simple, traditional trim profiles that have the same dimensional qualities as the original trim materials in Waterford.
7. Construct doors of wood (preferred material). Composite products may also be considered for new construction depending on their design and visual appearance.
8. Storm and/or screen doors should be of a full-view design that allows a complete view of the front door. These designs should not reference a particular architectural style or period.



A glass panel storm door should be large enough to reveal the basic design of the door beyond.



ELEMENTS OF A THREE-PART SIMULATED DIVIDED LIGHT WINDOW



Three-part simulated divided light windows are often used in new construction and alleviate the need for a storm window.

Windows

9. Use windows with true-divided-lights or interior and exterior fixed muntins with internal spacers to reference traditional designs and match the style of the building.
10. Construct windows of wood or a wood composite that visually approximates the appearance of wood. Fiberglass windows that replicate the visual appearance of wood may also be appropriate.
11. Use simple, traditional trim profiles that have the same dimensional qualities as the original trim materials in Waterford.

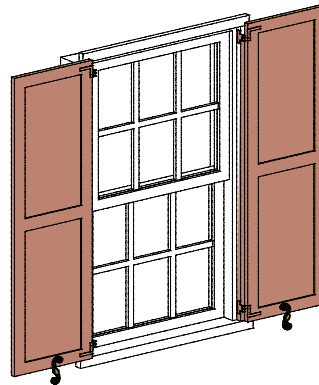
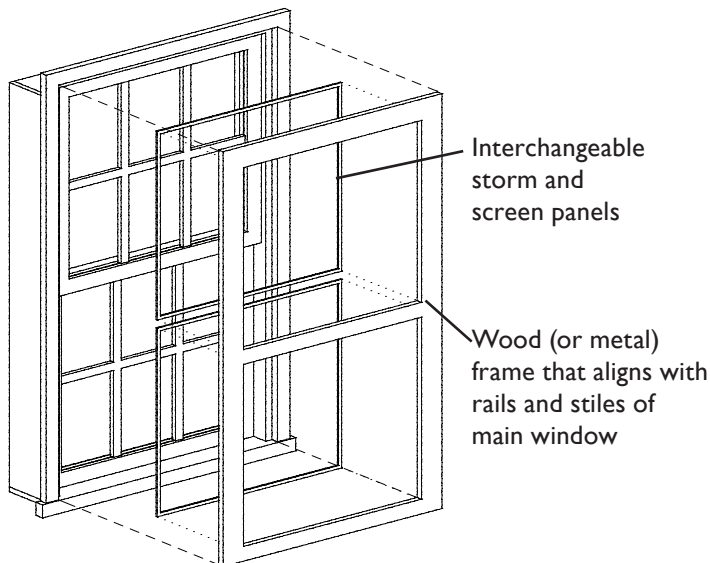
Storm Windows

12. Install exterior storm window and doors so that they do not obscure the windows or doors.
13. Wood is the preferable material for storm windows. Metal conducts temperature changes much more quickly than wood, which absorbs them.

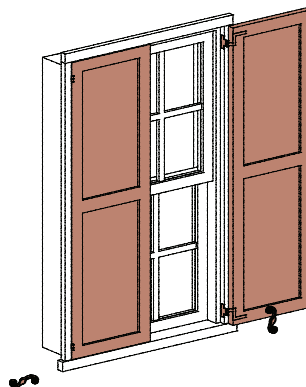
Shutters

14. Use shutters of wood or a wood composite (rather than metal or vinyl) scaled to fit the window opening.
15. Use shutters for new construction only when they will be mounted on hinges to allow for operability or sized and mounted to appear operable. When incorporated into green designs, shutters can be used to block the effects of wind and sun, and household energy consumption can be drastically reduced.

ELEMENTS OF A STORM WINDOW



Properly mounted shutters have upper and lower hinges and are kept open with shutter dogs.



When shutters are properly sized they cover the window and fit closely within the frame.



Early porches in Waterford were often elevated due to raised basement construction and/or the location of a commercial space on the ground level.



Wrap-around porches became popular at the end of the nineteenth century.

N. FRONT AND REAR PORCHES

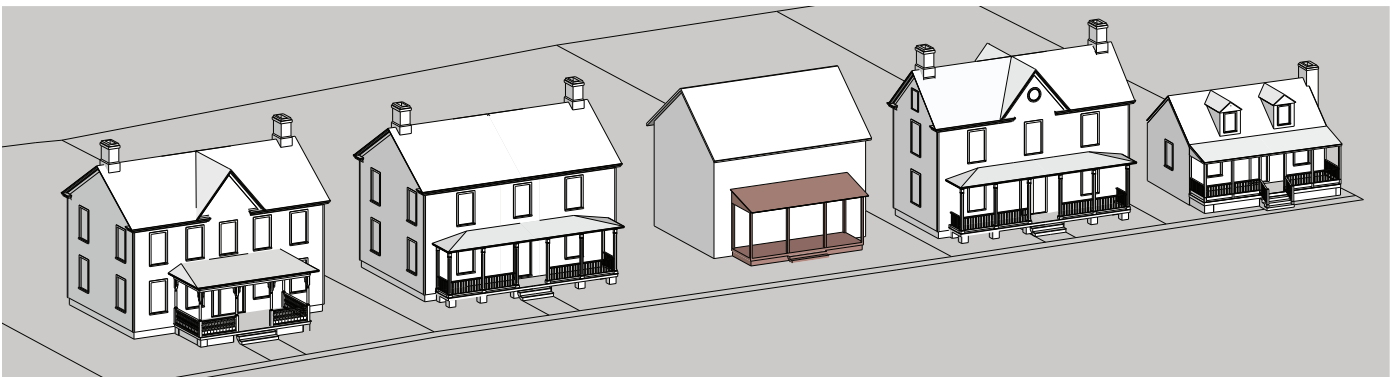
A porch or portico is the focal point of the many Waterford houses. Because of their decoration and articulation, these features help to add variety and rhythm to each block. Porches have traditionally been a social gathering point. New residential buildings can better blend with certain areas of the historic district if a porch is incorporated into the design. Two-story porches are commonly found in early area of Waterford. Single-story and wrap-around porches are more common along Second and High streets.

■ GUIDELINES

1. Include a porch in new residential construction if it reflects the prevailing condition of adjacent structures.
2. Make sure that new porch designs reflect the size, materials proportion and placement of historic porches in Waterford.
3. Add porches to secondary elevations where appropriate to shield the house from the sun during the summer.



Many Waterford porches have classical rather than Victorian details.



Including a porch or portico in new construction design in Waterford, where precedent for such exists, will reinforce the connection the houses have with one another and the street as well as reducing the perceived scale of the building.





Side or rear porches are prevalent in the district and can provide outdoor spaces instead of the modern deck.

O. DECKS

Decks gained widespread popularity in the last quarter of the twentieth century. Many deck designs are too large, are not integrated into the home design, and are too tall in their placement.

Often this new deck placement results in an outdoor living space that may be subjected to the harsh effects of sun and wind, with no protection for people or the structure, as a porch can provide. Without proper design, decks may also lack connection to either the house to which it is attached or garden spaces upon which it focuses.

■ INAPPROPRIATE TREATMENTS

1. Decks are not encouraged in the historic districts. Decks are not appropriate on historic buildings, particularly in village settings.
2. The use of pressure-treated wood is not recommended in areas where it will remain unpainted and will be visible from public rights-of-way.
3. Decks should not appear to be supported by wooden stilts.
4. Decks should not be placed on the second story of the house, resulting in a full flight of stairs to ground level or no connection to the yard level.

■ GUIDELINES

1. Site the house so that the transition from house, to deck or terrace, to yard level is as direct as possible.
2. Site any deck where it is not visible from the front of the structure, preferably on the least visible elevation of the building.
3. Use traditional porch designs to relate outdoor spaces to your traditional structure by the:
 - a. Use of porch piers clad or wrapped with brick or stone
 - b. inclusion of a roof to cover the deck
 - c. use of railing designs that relate to any other railings on other porches of the house
 - d. screening of open space under decks from view using materials that provide a traditional appearance such as lattice
4. Use plantings to screen decks from view from public rights-of-way.
5. Decks should be painted following the same color scheme as the house.
6. Integrate decks into the footprint of the structure.



P. FOUNDATION

The foundation forms the base of the building. Most buildings in the historic districts have stone foundations. Some foundations are elevated a full-story above ground level while others are built into a slope to work with the sloping site topography. The design of new structures should incorporate foundations for aesthetic as well as functional reasons.

■ INAPPROPRIATE TREATMENTS

1. Do not use a concrete slab foundation without a raised floor level.
2. Do not use concrete block or formed brick for foundations.

■ GUIDELINES

1. Respect the height, contrast of materials, and textures of foundations on surrounding historic buildings.
2. Distinguish the foundation from the rest of the building through the change of materials or the use of a water table.
3. Use stone as the foundation material or cladding for new construction. Brick was rarely used as a foundation material in the historic districts as it was found to be much more porous than the local fieldstone.
4. Select stone that echoes the colorations of local stone found in the district.
5. Some alternative stone and brick veneer materials may be acceptable as cladding for new foundations. Cladding should be continued to all sides of a new foundation, not just the front elevation.
6. Dress new stones with natural ingredients that will aid in the development of a timeless, weathered appearance. Recipes using vinegar, buttermilk, beer, compost, oatmeal, mold spores and easily obtained ingredients can be found on the internet.
7. Parging, the covering of the structure's foundation material with a coat of cement mortar, may be an appropriate foundation treatment on smaller structures and additions.



Note the differing heights of the foundations on these two examples due to the topography. The entry to each building is located at street level.



New construction should respect the traditional height of foundations found on adjacent historic houses.





Waterford's historic structures have a wide variety of details which are linked to the era of their construction and architectural style. These details may provide appropriate precedents for new construction in Waterford.



Q. ARCHITECTURAL DETAILS AND DECORATION

The historic structures located in Waterford, are, for the most part, vernacular buildings with simple details. Quaker farmers from eastern Pennsylvania pioneered the settlement of this area and brought with them the building traditions of their rural heritage.

With few exceptions, the early houses are balanced compositions reflecting the influence of Georgian and Federal precedents but lacking the intricacies made possible by skilled carvers and other artisans located in urban areas. Quaker doctrine stressed plainness and the lack of any outward distinction of social hierarchy. Early structures often used simple decorative features such as unadorned cornices and plain window and door trim, brick jack arches over windows, paneled wood doors, transoms, and louvered shutters.

As new residents, of more varied backgrounds, moved to Waterford this early Quaker simplicity was challenged. However, it was not until the arrival of the railroad, and the delivery of mass-produced building materials that the local aesthetics changed. Although Waterford continued to build in vernacular traditions, the turned and sawn woodwork of the Victorian era marks late-nineteenth century dwellings in the district. Examples of Victorian embellishments include bracketed cornices, decorative windows, patterned wood and slate shingles, and decorative window caps, and porches with turned posts, sawn balusters and brackets.

INAPPROPRIATE TREATMENTS

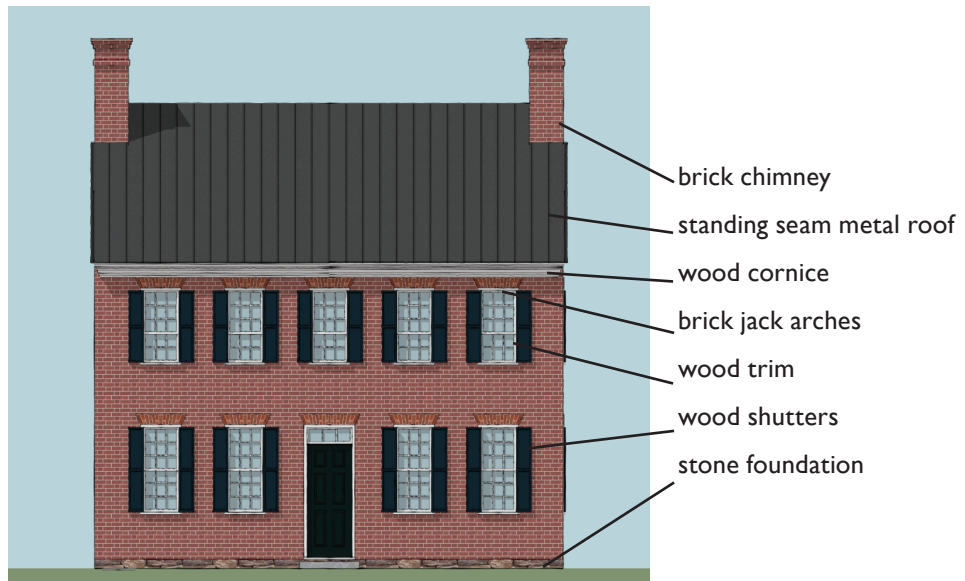
1. Do not design new construction without details that provide a visual link to the historic structures in the district.
2. Refrain from the “pasting-on” of historic details to a modern unadorned building.

GUIDELINES

1. Use architectural details that are compatible with the existing building. These include but are not limited to roof overhangs, cornices, chimneys, window and door trim, brick bond patterns, wood siding and shingle patterns, and entry features. Elements such as these provide much of the decoration for historic structures in Waterford.
2. Use only details that replicate the original in dimensions, proportions, and appearance.



Brick was among the most common early building materials used in Waterford. Stone was also a popular construction material and was used as a foundation material, even on brick construction.



R. MATERIALS AND TEXTURES

The choice of materials and textures are among the most important decisions in establishing the basic character of a building. The use of inappropriate and simulated materials is one of the primary reasons for incompatible new construction in a historic area.

Waterford's historic structures display a limited number of materials and textures including native fieldstone laid in a variety of patterns with differing mortar profiles, brick laid in Flemish and common bonds, molded brick, log, weatherboard, clapboard, and German wood siding, decorative wooden shingles, and wood trim in a wide range of profiles and descriptions.

■ INAPPROPRIATE TREATMENTS

Masonry and Substitutes

1. Exposed concrete or split-face block
2. Brick of highly contrasting shades
3. Tinted mortars outside of historic color range
4. Synthetic stucco (EIFS)
5. Smooth, wire cut brick

Wood and Substitutes

6. Siding or shingles with an artificial wood-grained texture.
7. Rough wood shakes, except on early log structures
8. Vinyl or aluminum siding and trim
9. Plastic, including fiberglass-reinforced plastic

Metal

10. Metal should not be used, except as a roof covering.



CHAPTER FOUR - GUIDELINES FOR NEW CONSTRUCTION

■ **GUIDELINES**

1. Choose materials and textures that are compatible with and complementary to adjacent historic structures.
2. In order to retain the traditional image of the districts, stone, brick, stucco, and wood siding are the most appropriate choices for wall-cladding materials.
3. Use uniform primary wall-cladding material on all sides of the building.
4. Differentiate the foundation from the main wall plane through a change in material or texture.
5. Employ the use of a limited number of different historic materials if the new construction is broken into separate masses to simulate a dwelling that has evolved over time. Follow #3 for each mass.
6. For brick and stone construction, particular attention should be given to following historic precedents for bonding patterns, mortar profiles and compositions, and color.
7. Use wood as a first choice for elements such as trim, porch elements, and other decorative features, following historic precedents. Substitute materials are also available for trim details but must be able to be worked in the traditional manner of wood. See *Chapter 7: Materials – Substitute Materials* for more information.
8. Cementitious products including shingles and siding may be appropriate for new construction if applied in traditional patterns. These materials should be smooth-finished and applied with a five-inch to seven-inch reveal according to historic precedents.
9. Consider traditional standing-seam metal such as galvanized steel and terne (a zinc and tin alloy). New stainless steel and pre-coated terne products may also be appropriate. Metal roofing products should be manufactured in the traditional widths and installed with real or simulated standing seams. The appropriate seam height for residential standing-seam roofs is between one-and-one-quarter and one-and-one-half inches.
10. Modern substitutes that are compatible with historic materials may be acceptable as substitutes if the material replicates the visual qualities and workability of the original material.



The foundation of the Waterford Mill is constructed of local fieldstone. Locally made brick completes the upper levels.



These early structures on Bond Street illustrate the stone, brick and log construction (clad in weatherboard) that are characteristic of Waterford's historic structures.



TYPICAL ELEMENTS OF A COMMERCIAL FACADE AND STOREFRONT

Cornice

The cornice decorates the top of the building and may be made of metal, masonry, or wood. Some decorative cornices project from the building while an ornamental band delineates others. The top of the wall may have a patterned brick band or may have a coping of brick, concrete or metal.

Upper Facade

Upper facades are characterized by smaller window openings that repeat on each floor. These windows may vary in size, type, and decoration but usually are the same for each floor. Other facade details may be present on the upper level facades such as brick banding, corbelling, metal grilles or decorative panels.

Storefront

The first-floor storefront is transparent and is framed by vertical structural piers and a horizontal supporting beam, leaving a void where the storefront elements fit. The storefront elements consist of an entrance to the upper floors. Later buildings may lack several elements of traditional storefronts such as transom windows or decorative details.



S. STOREFRONTS

Few buildings were built purely for commercial purposes in Waterford. The post office and general store were built in the late-nineteenth century. Often a structure was built for both commercial and residential purposes, with the storeowner living above the shop. At the current time, there are no opportunities for new development in the commercial area of the district. The rural commercial zoning does allow such new construction if a lot were to become available.





The Corner Store is based on the Italianate commercial style popular in the late nineteenth century.

■ INAPPROPRIATE TREATMENT

1. Avoid using materials and elements that are incompatible with the historic district when designing a new storefront. These materials include aluminum-frame windows and doors, unpainted metal panels or display framing, enameled panels, rough-textured wood, synthetic siding materials, metal awnings, inoperable shutters, or roof forms not historically found in the district.

■ GUIDELINES

1. Design new storefronts in Waterford to relate to the configuration of existing historic examples.
2. Use traditional materials for the design of new storefronts in Waterford.



The first floor of this rowhouse on Main Street served as commercial space. Note the four-pane display windows and recessed entry.





For new construction that is inspired by vernacular Victorian architecture, a three-color paint scheme based on historic paint colors is appropriate.

NOTE:

While the Historic District Review Committee (HDRC) does not review color for new construction in the historic districts, these recommendations are provided as reference for the property owners in the districts.

T. COLOR

Paint colors of historic structures in Waterford were dependent on the architectural style of the house and the amount of decorative trim. When choosing colors for new construction, respect the historic palette for the styles of adjacent historic structures and stylistic references of the new dwelling.

■ INAPPROPRIATE TREATMENTS

1. Do not use jarring, garish, or intrusive colors.
2. Do not paint unpainted masonry surfaces.

■ RECOMMENDATIONS FOR COMPATIBILITY

1. Select a coordinated color palette informed by historic precedent and compatible with adjacent buildings.
2. See *Chapter 7* of these guidelines for appropriate palettes of historic colors by architectural style.

